L. **spathulatum** (Kerner), n. comb. *Pleurogyne spathulata* Kerner, Ber. Naturw. Ver. Innsbruck, i. 104 (1870).

L. **diffusum** (Maxim.), n. comb. *Pleurogyne diffusa* Maxim. Bull. Acad. Pétersb. xxxii. 510 (1888).

L. **Lubahnianum** (Vatke), n. comb. *Pleurogyne Lubahniana* Vatke, Bremen, Abh. ix. 127 (1885).

L. **minus** (Griseb.), n. comb. *Ophelia minor* Griseb. in DC. Prodr. ix. 126 (1845).

Gray Herbarium.

AN EXCURSION TO MT. WASHINGTON, MASSACHUSETTS, AND BASH-BISH FALLS.

Clarence H. Knowlton.

When the New England Botanical Club made its 1919 spring excursion to southern Berkshire County, Mr. Charles Schweinfurth and I received as our first day's assignment the southwestern corner of the County and State, the township of Mt. Washington, especially the region of Hudson River drainage. We found about 200 species in identifiable condition, and collected them for the Club Herbarium. My partner selected pteridophytes and woody plants while I gathered the others. This article is based on our common experiences and observations on May 30. I am much indebted to Mr. Schweinfurth for notes and suggestions in writing this.

The township consists of a somewhat detached group of the Taconic Mountains. The central plateau is about 1600 feet above sea-level, with higher points at the edges, especially the east, Mt. Everett reaching 2624 feet, and Mt. Race 2395 feet. The interior is drained by several brooks, which join Bash-Bish brook and flow westward into the Hudson. The general contours and elevation are strikingly similar to another Taconic section 150 miles further north, in Tinmouth, Vermont. The country rock is mica-schist, although casual plants of *Cystopteris bulbifera*, *Ranunculus allegheniensis*, *Viola rostrata* and *Senecio obovatus* indicate the presence of lime, perhaps in the glacial drift.

Starting from South Egremont we climbed 900 feet to the central

plateau by a sinuous and difficult road, with occasional glimpses of white birches and *Rhododendron canescens*, the latter in full bloom. In this high region we made our first collections — *Castanea dentata, Corylus rostrata, Quercus alba, Q. ilicifolia, Amelanchier canadensis, Prunus virginiana, P. serotina, P. pennsylvanica, Vaccinium vacillans, V. canadense, Kalmia latifolia, Lyonia ligustrina, Diervilla Lonicera, Smilax herbacea, Clintonia borealis, Geum rivale, Polygala paucifolia, Pedicularis canadensis*, and *Senecio aureus*, with other familiar plants, not very different from those seen in similar acid areas in the Fitchburg plateau region.

The next halt was by a school-house. Happy children, with woods and fields and a real brook to play in! In the brook grew *Stellaria borealis* Bigel., var. *isophylla* Fernald and *Geum virginianum*, with *Zizia aurea* close by, while in the light woods were *Uvularia perfoliata* and the inevitable *Aralia nudicaulis*. Around an old house-site were several introduced plants of which *Levisticum officinale* may deserve the honor of a record, along with an apparently transplanted native, *Viburnum Opulus*, var. *americanum*.

We now coasted rapidly into the Vale of Bash-Bish. Here were the rich woods we expected, with *Tsuga canadensis, Betula lutea* and *B. lenta, Fagus grandifolia, Ulmus fulva, Tilia americana* and *Acer saccharum*, together with the following shrubs: *Taxus canadensis, Hamamelis virginiana, Dirca palustris, Ribes Cynosbati, Acer pennsylvanicum, Lonicera canadensis, Viburnum alnifolium* and *Sambucus racemosa*.

There were dry woods, too, mainly oak with some chestnut and a few white pines. In the rocky woods above the falls *Quercus Prinus* was very abundant, with some specimens of *Fraxinus americana*. In this region were brilliant flowering clumps of *Silene pennsylvanica* in the driest places. *Quercus alba* and *Q. rubra* were further down the gorge. With these trees grew *Myrica asplenifolia, Rubus alleghenien-sis, Ceanothus americanus, Rhus typhina, Cornus florida, Vaccinium stamineum* and *Viburnum acerifolium*.

The greatest surprise of the day was the striking contrast between the northern sunny side of the gorge, and the shaded southern side.— To find *Oxalis americana* and *Acer spicatum* on one hand, and then only a few yards away *Gerardia virginiana* and *Scirpus planifolius* was indeed strange. The following lists of herbaceous plants emphasize the contrast further.

RICH WOODS.

Adiantum pedatum
Aspidium marginale
" noveboracense
" spinulosum, var. intermedium
Phegopteris Dryopteris
" polypodioides
Polystichum acrostichoides
Botryichum virginianum
Brachyelytrum erectum
Carex bromoides
" gracillima
" laxiflora, var. blanda
" leptonervia Fernald
" scabrata
Luzula saltuensis
Maianthemum canadense
Polygonatum biflorum
Smilacina racemosa
Trillium erectum
Laportea canadensis
Asarum canadense
Actaea alba
" rubra
Ranunculus recurvatus
Ranunculus abortivus
" " var. encyclus
Caulophyllum thalictroides
Dentaria diphylla
Mitella diphylla
Tiarella cordifolia
Fragaria vesca, var. americana
Rubus odoratus
Amphicarpa monoica
Oxalis americana
Viola blanda
" canadensis
" eriocarpa Schwein.
" pubescens
Circaea alpina
Sanicula marilandica
Osmorhiza Claytoni
Trientalis americana
Hydrophyllum americanum
Collinsonia canadensis
Mitchella repens
Aster acuminatus
" divaricatus
Erigeron philadelphicus
Solidago latifolia

DRY WOODS.

Oryzopsis asperifolia
Carex communis
" digitalis
" pedunculata
" pennsylvanica, var. lucorum
Scirpus planifolius
Silene pennsylvanica
Thalictrum dioicum
Hepatica americana
Saxifraga virginiensis
Hypericum punctatum
Lysimachia quadrifolia
Satureja vulgaris
Gerardia virginica
Veronica officinalis
Antennaria neodioica
" " var. grandis
Solidago caesia

The Bash-Bish Falls are most interesting. The brook descends through a narrow ravine for several hundred feet, then down through a deep gorge in the schist, then near the State Line falls in a beautiful cataract some forty feet. The region is picturesque and well worth a visit but automobilists should approach it warily, and from the splendid road on the New York side, for the State Line is guarded by

a monumental "thank-you-marm." Our springs apparently stood the test, only to disintegrate some days later in Vermont.

On dry ledges high above the falls grew *Woodsia ilvensis;* on shaded ledges the familiar *Polypodium vulgare.* Near the foot of the falls was one good plant of *Adlumia fungosa,* and a nice sod of *Sagina procumbens,* while *Campanula rotundifolia* was frequent in moist crevices. A single plant of *Arabis lyrata* nestled among the stones of the gorge wall, while in the sandy bank higher up grew *A. laevigata* and *Tussilago* still showing a few blooms. Along the stream were beds of *Tiarella,* with *Rhus Toxicodendron* and *Rubus triflorus,* and in the stream itself clumps of *Poa saltuensis* Fernald, *Carex torta, Cardamine pennsylvanica, Chrysosplenium americanum* and *Steironema ciliatum.* We found one *Gentiana* but whether *G. Andrewsii* Griseb. or *G. clausa* Raf. did not yet appear.

The region comes within the New York floral area and has been visited by New York botanists as may be seen by articles relating to it.[1]

Some contributors to its literature have raised a troublesome question of synonymy by writing of Copake Falls, N. Y. when they mean Bash-Bish Falls, Mass. The lists of Mr. Stewart H. Burnham and Mr. Sereno Stetson are very interesting, as both are evidently keen collectors, and their visits took place earlier and later in the season than ours of May 30.

Plants on Mr. Burnham's list which we did not find are:

Asplenium Trichomanes
Panicum latifolium
Muhlenbergia tenuiflora
Hystrix patula
Carex brunnescens Poir., var. gracilior Britton
" trisperma
" mirabilis
Quercus coccinea
Cerastium nutans
Clematis verticillaris
Pyrus Americana
Rosa blanda
Desmodium bracteosum
Aralia hispida
Cornus circinata
Asclepias phytolaccoides
Pycnanthemum incanum
Mentha gentilis
Helianthus divaricatus

Mr. Stetson viewed the general region as one geographic unit, paying very little attention to the State Line, so it is not possible to

[1] The Rare Mosses of Bash-Bish Falls. Elizabeth G. Britton, Torreya I, 9, 1901.
The Flora of Copake Falls, N. Y. Sereno Stetson, Torreya XIII, 121–133, 1913.
A Supplementary List of the Plants of Copake Falls, N. Y. Stewart H. Burnham, Torreya XIII, 217–19, 1913.
1913 notes on the Flora of Copake Falls, N. Y. Sereno Stetson, Torreya XIV, 42–45, 1914.

know absolutely which of his plants grew in Massachusetts. He explored the western slopes of the hills very thoroughly, and in many cases it would be hard to ascertain on just which side of the invisible line his specimens grew. The following are selected as perhaps within our limits.

Juniperus virginiana
Corallorrhiza maculata
" trifida
Cypripedium acaule
" parviflorum, var. pubescens
Habenaria hyperborea
Claytonia virginica
Desmodium paniculatum
" nudiflorum
Lespedeza frutescens
Gentiana quinquefolia
Monarda didyma
" fistulosa
Gerardia flava
Veronica americana
Cuscuta Coryli
Orobanche uniflora
Aster patens
" prenanthoides
Eupatorium urticaefolium
Solidago erecta
" hispida
" squarrosa

The neighboring region of New York furnished us several additional species. In dry woods just inside Copake, we found good specimens of *Polygala Senega*, while in a calcareous swamp near the State road just north of Copake village grew *Salix candida* and *S. serissima*, *Carex limosa* and *C. diandra* var. *ramosa*. These interesting plants do not appear on the New York lists.

This day of exploration brought us very little that was new, but the region proved most interesting from the large number of species and the unexpected contrasts. We secured so many plants not on the Copake lists that further explorations should bring out still other rarities, for the area is extensive, there being many ravines and slopes, with decided differences in altitude and in moisture content.

HINGHAM, MASSACHUSETTS.